

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Peter Wilding et al.
Serial No. : Not yet assigned
Filing Date : Herewith
Examiner : Not yet assigned
Group Art Unit : Not yet assigned
Entitled : DEVICE AND METHOD FOR THE
DETECTION OF AN ANALYTE
UTILIZING MESOSCALE FLOW
SYSTEMS

Suite 2400
1601 Market Street
Philadelphia, PA 19103
(215) 563-4100 (telephone)
(215) 563-4044 (facsimile)
Our File No. 1070-PENN-E890-CON5

Assistant Commissioner
for Patents
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

In accordance with the provisions of 37 C.F.R. §1.56, applicants hereby submit the attached PTO Form-1449, listing references which the Patent Examiner is requested to consider and make of record in the above-identified application. Copies of the listed references are enclosed herewith. This submission is believed to be in full compliance with the requirements of 37 C.F.R. §1.98.

In the opinion of the undersigned, the foregoing references are the most pertinent of which the undersigned is aware. However, no representation is made or intended that more pertinent references do not exist.

This submission is not an admission that the reference listed on the attached Form PTO-1449 constitute prior art against the claims of this application.

The Examiner is respectfully requested to confirm receipt and consideration of the cited references by initialing the returning a copy of the attached Form PTO-1449 in accordance with MPEP §609.

Early and favorable consideration leading to prompt issuance of this application is earnestly solicited.

In the event any fee is due in connection with the consideration of this request, the Commissioner is authorized to charge any such fee to the account of the undersigned attorneys, Deposit Account No. 04-1406.

DANN, DORFMAN, HERRELL
and SKILLMAN, P.C.
Agent for Applicant

By Patrick J. Hagan
Patrick J. Hagan
Registration No. 27,643

Enclosures

FORM PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application No.: Not yet assigned	Art Unit: Not yet assigned
				Filing Date:	Examiner Name:
				Herewith	Not yet assigned
				First Named Inventor:	Attorney Docket No.:
				Peter Wilding	1070-PENN-E890-CON5
Sheet	1	of	1		

U.S. PATENT DOCUMENT

Examiner Initial	CITE NO.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document

FOREIGN PATENT DOCUMENTS

Examiner Initial	CITE NO.	Foreign patent Document Number	COUNTRY	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	English Translation Attached
	B1	WO 91/16966	WO	November 14, 1991	Ekstrom et al.	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initial	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	English Translation Attached

EXAMINER SIGNATURE:	DATE CONSIDERED:
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Assistant Commissioner
for Patents
Alexandria, VA 22313-1450

REQUEST FOR LISING OF REFERENCES

Dear Sir:

Applicants in the above-identified application are
submitting herewith the following documents:

1. A copy of Form PTO-892 (Notice of References Cited)
from the great grandparent case, U.S. Application No.
08/811,873, filed March 5, 1997;
2. A copy of Form PTO-892 (Notice of References Cited)
from the great great grandparent case, U.S.
Application No. 08/347,498, filed November 30, 1994;
and
3. A copy of Forms PTO-1449 which were filed in the
great great great grandparent case, U.S. Application
No. 07/877,702, filed May 1, 1992.

It is respectfully requested that the references included
in the above-mentioned Forms PTO-892 and Forms PTO-1449 be
listed on the face of the patent granted to the above-

identified application, in accordance with the following provision of §609 of the Manual of Patent Examining Procedure:

[T]he examiner will consider information
**>which has been considered by< the
Office in a parent application when
examining a continuation or continuation-
in-part application (See MPEP §>201.06(b)<
which is not a file wrapper continuing
application, and a list of the information
need not be submitted in the
*>continuation or continuation-in-part<
application unless applicant desires the
information to be printed on the patent
[emphasis added].

In the event any fee is due in connection with the consideration of this request, the Commissioner is authorized to charge any such fee to the account of the undersigned attorneys, Deposit Account No. 04-1406.

DANN, DORFMAN, HERRELL
and SKILLMAN, P.C.
Agent for Applicant

By Patrick J. Hagan
Patrick J. Hagan
Registration No. 27,643

Enclosures

08/811873

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3

NOTICE OF REFERENCES CITED

APPLICANT(S)

Wilding et al

U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
A	5304487	4/19/94	Wilding et al	422	55	5/1/92
B	5677469	6/10/97	Wilding et al	422	55	11/30/94
C						
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FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG.	PP. SPEC.
L								
M								
N								
O								
P								
Q								

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

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NOTICE OF REFERENCES CITED

APPLICANT(S)

Wilding et al

U.S. PATENT DOCUMENTS

* A	DOCUMENT NO.							DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
A	5	3	0	4	4	8	7	4/14/94	Wilding et al	422	55	5/1/92
B												
C												
D												
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FOREIGN PATENT DOCUMENTS

* L	DOCUMENT NO.							DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. PP. DWG. SPEC.	
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M														
N														
O														
P														
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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

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EXAMINER

C. C. Chi

DATE

5/12/95

FORM PTO-1449				ATTY DOCKET NO.: UPA-001 (8261/2)					
INFORMATION DISCLOSURE STATEMENT				APPLICANT: Wilding et al.					
				SERIAL NO.: 07/877,702					
				FILING DATE: May 1, 1992		GROUP:			
U.S. PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
	AA	4,233,029	11/80	Columbus					
	AB	4,302,313	11/81	Columbus					
	AC	4,618,476	10/86	Columbus					
	AD	4,911,782	3/90	Brown					
FOREIGN PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG Y/N
	BA	0 320 308	6/89	EP					Y
	BB	0 439 182	7/91	EP					Y
	BC	3,915,920	11/90	DE					N
	BD	2,191,110	12/87	GB					Y
OTHER ART, JOURNAL ARTICLES, ETC.									
EXAM. INIT.									
	CA	Anderson, <u>Nature</u> , 355:379 (1992).							
	CB	Angell, et al., <u>Scientific American</u> , 248:44-55 (1983).							
	CC	Appenzeller, <u>Science</u> , 254:1300-1342 (1991).							
	CD	Barany, <u>Proc. Natl. Acad. Sci</u> , 88:189-192 (1991).							
	CE	Brown, "Development of a Stopped-Flow Cytometer, "NSF Grant No. ISI 87-60730							
	CF	Brunette, <u>Exper. Cell Res.</u> , 167: 203-217 (1986).							
	CG	Brunette, <u>Exper. Cell Res.</u> , 164: 11-26 (1986).							

FORM PTO-1449		ATTY DOCKET NO.: UPA-001 (8261/2)	
INFORMATION DISCLOSURE STATEMENT		APPLICANT: Wilding et al.	
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		FILING DATE: May 1, 1992	GROUP:
EXAM. INIT.			
	CH	Columbus et al., <u>Clin. Chem.</u> , 33:1531-1537 (1987).	
	CI	DeLuca et al., <u>Arch. Biochem. Biophys.</u> , 255:285-292 (1983).	
	CJ	Dessy, <u>Chemometrics and Intelligent Laboratory Systems</u> , 8:311 (1990) Abstract.	
	CK	Esashi et al., "Integrated Flow Control Systems Fabricated on a Silicon Wafer," Proceedings, Electrochemical Society Conference, HI (18-23 October, 1987), Electrochemical Society, Pennington, NJ, pp. 31-38B, 1987.	
	CL	Fromherz et al., <u>Biochimica et Biophysica Acta</u> , 1062:103-107 (1991).	
	CM	Goin et al., <u>Clin. Chem.</u> , 32:1655-1659 (1986).	
	CN	Haller in: <u>Solid Phase Biochemistry</u> , W.H. Scouten, Ed., John Wiley, New York, pp. 535-597 (1983).	
	CO	Hanazato et al., <u>IEEE Transactions Electron. Devices</u> ; ED33:47-51 (1986).	
	CP	Hoopman, "Microchanneled Structures," Applied Technology Laboratory, 3M Center, St. Paul, MN 55144-1000	
	CQ	Howe et al., <u>IEEE Transactions Electron Devices</u> , ED33:499-506 (1986).	
	CR	Hung et al, <u>Med. & Biol. Engng.</u> , 9:237-245 (1971).	
	CS	Jonsson, <u>Methods in Enzymology</u> , 137:381-389 (1988).	
	CT	Kennedy et al., <u>Clin. Chem. Acta.</u> , 70:1-31 (1976).	
	CU	Kenny et al., <u>Appl. Phys. Lett.</u> , 58:100-102 (1991).	
	CV	Kikuchi et al., "Microchannels Made on Silicon Wafer for Measurement of Flow Properties of Blood Cells," <u>Biorheology</u> , 26:1055 (1989), Abstract.	
	CW	Kittilsland et al., <u>Journal de Physique</u> , 49 (C4):641-644 (1988).	
	CX	Kittilsland et al., <u>Sensors and Activators</u> , A21-A23:904-907 (1990).	
	CY	Kricka et al., "Liquid Transport in Micron and Submicron Channels," <u>SPIE</u> , 1167:159-168 (1989).	
	CZ	Kricka et al., <u>Clin Chem.</u> , 26:741-744 (1980).	
	CCA	LaCelle, <u>Blood Cells</u> , 12:179-189 (1986).	
	CCB	Mandenius et al., <u>Anal. Biochem.</u> , 137:106-114 (1984).	
	CCC	Mandenius et al., <u>Anal. Biochem.</u> , 170:68-72 (1988).	

FORM PTO-1449		ATTY DOCKET NO.: UPA-001 (8261/2)	
INFORMATION DISCLOSURE STATEMENT		APPLICANT: Wilding et al.	
		SERIAL NO.: 07/877,702	
EXAM. INIT.		FILING DATE: May 1, 1992	GROUP:
	CCD	Mandenius et al., <u>Methods in Enzymology</u> , 137:388-394 (1988).	
	CCE	Manz et al., <u>Trends in Anal. Chem.</u> , 10:144-149 (1991).	
	CCF	Masuda et al., <u>Proc. IEEE/IAS Meeting</u> , pp. 1549-1553 (1987)	
	CCG	McCartney et al., <u>Cancer Res.</u> , 41:3046-3051 (1981).	
	CCH	Moghissi et al., <u>Am. J. Obstet. Gynecol.</u> , 114:405-(1972).	
	CCI	Nakamura, <u>Immunochemical Assays and Biosensor Technology for the 1990's</u> , American Society of Microbiology, Washington, D.C., pp. 205-215 (1992).	
	CCJ	Nakamura et al., <u>Anal. Chem.</u> , 63:268-272 (1991).	
	CCK	Parce et al., <u>Science</u> , 24:243-247 (1989).	
	CCL	Rosenberg et al., <u>Clin. Chem.</u> , 30:1462-1466 (1984).	
	CCM	Rosenberg et al., <u>Clin. Chem.</u> , 31:1444-1448 (1985).	
	CCN	Sankolli et al., <u>J. Immun. Methods</u> , 104:191-194 (1987).	
	CCO	Sato, et al., <u>Sensors and Actuators</u> , A21-A23:948-951 (1990).	
	CCP	Shoji, et al., <u>Sensors and Actuators</u> , 15:101-107 (1988).	
	CCQ	Stange et al., <u>Biomaterials</u> , 9:3-6 (1988).	
	CCR	Van Lintel, <u>Sensors and Actuators</u> , 15:153-167 (1988).	
	CCS	Wallis et al., <u>J. Amer. Ceramic Soc.</u> , 53:563-567 (1970).	
	CCT	Washizu et al., <u>Proceedings IEEE/IAS Meeting</u> , pp. 1735-1740 (1988).	
	CCU	Weissman et al. <u>Am Inst. Chem. Eng. J.</u> 17:25-30 (1971).	
	CCV	Zemel et al. in: <u>Fundamentals and Applications of Chemical Sensors</u> , D. Schuetzle and R. Hammerle, Eds., Washington, D.C., 1986, p. 2-38.	
	CCW	Biotrack, Ciba Corning, May, 1989.	
	CCX	Wilding, <u>Advanced Hospital Technology Laboratory</u> , October, 1990 pp. 38-42.	
	CCY	Roche, On-Trak TM , September, 1988.	
EXAMINER		DATE CONSIDERED	

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: UPA-001 (8261/2)

APPLICANT: Wilding et al.

SERIAL NO.: 07/877,702

FILING DATE: 05/01/92

GROUP :

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: UPA-001 (8261/2)

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GROUP:

[illegible]

EXAMINER

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FORM PTO-1449

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ATTORNEY DOCKET NO.: UPA-001 (8261/2)

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SERIAL NO.: 07/877,702

FILING DATE: 05/01/92

GROUP:

U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,963,498	10/16/90	Hillman			
	AB	5,135,720	08/04/92	Uchida			
	AC	5,147,606	09/15/92	Charlton			

EXAM. INIT.		OTHER ART, JOURNAL ARTICLES, ETC.
	CA	Kinosita et al., "Dual-View Microscopy With A Single Camera: Real-Time Imaging Of Molecular Orientations And Calcium," <u>J. Cell Biol.</u> , 115:67-73 (1991) (Abstract).

EXAMINER

DATE CONSIDERED

FORM PTO-1449

ATTORNEY DOCKET NO.: UPA-001 (8261/2)

INFORMATION DISCLOSURE STATEMENT

APPLICANT: Wilding et al.

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FILING DATE: 05/01/92

GROUP:

U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,906,439	3/06/90	Grenner			

EXAM. INIT.		OTHER ART, JOURNAL ARTICLES, ETC.

EXAMINER

| DATE CONSIDERED

FORM PTO-1449

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SERIAL NO.: 07/877,702

FILING DATE: 05/01/92

GROUP:

U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,908,112	03/13/90	Pace			

FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG Y/N
	BA	91/16966	11/91	PCT					

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: UPA-001 (8261/2)

APPLICANT: Wilding et al.

SERIAL NO.: 07/877,702

FILING DATE: 05/01/92

GROUP: 1802

U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG Y/N
	BA	WO 91/13338	9/05/91	PCT					

EXAM. INIT.		OTHER ART, JOURNAL ARTICLES, ETC.

EXAMINER

DATE CONSIDERED

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